

(c) *General rule for payment and administration.* Subject to the special rules and procedures in paragraph (d) of this section and the waiver authority in paragraph (e) of this section, as a general rule the provisions of § 199.14 shall govern payment and administration of claims under the supplemental care program as they do claim under CHAMPUS. To the extent necessary to interpret or implement the provisions of § 199.14, related provisions of this part shall also be applicable.

(d) *Special rules and procedures.* As exceptions to the general rule in paragraph (c) of this section, the special rules and procedures in this section shall govern payment and administration of claims under the supplemental care program. These special rules and procedures are subject to the waiver authority of paragraph (e) of this section.

* * * * *

(2) Preauthorization by the uniformed services of each service, except for services in cases of medical emergency (for which the definition in § 199.2 shall apply), is required for the supplemental care program. It is the responsibility of the active duty members to obtain preauthorization for each service. With respect to each emergency inpatient admission, after such time as the emergency condition is addressed, authorization for any proposed continued stay must be obtained within two working days of admission.

(3) With respect to the filing of claims and similar administrative matters for which this part refers to activities of the CHAMPUS fiscal intermediaries, for purposes of the supplemental care program, responsibilities for claims processing, payment and some other administrative matters may be assigned by the Director, OCHAMPUS to the same fiscal intermediaries, other contractor, or to the nearest military medical treatment facility or medical claims office.

(4) The annual cost pass-throughs for capital and direct medical education costs that are available under the CHAMPUS DRG-based payment system are also available, upon request, under the supplemental care program. To obtain payment include the number of active duty bed days as a separate line item on the annual request to the CHAMPUS fiscal intermediaries.

(5) For providers other than participating providers, the Director, OCHAMPUS may authorize payment in excess of CHAMPUS allowable amounts. No provider may bill an active duty member any amount in excess of the CHAMPUS allowable amount.

(e) *Waiver authority.* With the exception of statutory requirements, any restrictions or limitations pursuant to the general rule in paragraph (c) of this section, and special rules and procedures in paragraph (d) of this section may be waived by the Director, OCHAMPUS, at the request of an authorized official of the uniformed service concerned, based on a determination that such waiver is necessary to assure adequate availability of health care services to active duty members.

(f) *Authorities.* * * *

(3) The Director, OCHAMPUS shall issue procedural requirements for the implementation of this section, including requirement for claims submission similar to those established by § 199.7.

Dated: May 5, 1993.

L.M. Bynum,
Alternate OSD Federal Register Liaison
Officer, Department of Defense.
[FR Doc. 93-11025 Filed 5-10-93; 8 45 am]
BILLING CODE 5000-04-M

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 73

[MM Docket No. 92-231; RM-8076]

Radio Broadcasting Services; Marlboro, VT

AGENCY: Federal Communications Commission.

ACTION: Proposed rule; termination.

SUMMARY: The Commission dismisses the proposal filed by Mountain View Broadcasting, Inc. (RM-8076), requesting the deletion of vacant Channel 268A at Marlboro, Vermont, because expressions of interest in the channel have been filed. See 57 FR 49056, October 29, 1992. With this action, this proceeding is terminated.

DATE: This proceeding is terminated effective April 30, 1993.

FOR FURTHER INFORMATION CONTACT: Pamela Blumenthal, Mass Media Bureau, (202) 634-6530.

SUPPLEMENTARY INFORMATION: This a synopsis of the Commission's Report and Order, MM Docket No. 92-231, adopted April 9, 1993, and released April 30, 1993. The full text of this Commission decision is available for inspection and copying during normal business hours in the FCC Dockets Branch (Room 230), 1919 M Street, NW., Washington, DC. The complete text of this decision may also be purchased from the Commission copy contractor,

ITS, Inc., (202) 857-3800, 2100 M Street, NW., suite 140, Washington, DC 20037.

List of Subjects in 47 CFR Part 73

Radio broadcasting.

Federal Communications Commission.

Michael C. Ruger,
Chief, Allocations Branch, Policy and Rules
Division, Mass Media Bureau.

[FR Doc. 93-10624 Filed 5-10-93; 8:45 am]

BILLING CODE 6712-01-M

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

RIN 1018-AB97

Endangered and Threatened Wildlife and Plants; Proposed Endangered Status for Three Hawaiian Plant Species of the Genus *Melicope*

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

SUMMARY: The U.S. Fish and Wildlife Service (Service) proposes endangered status pursuant to the Endangered Species Act of 1973, as amended (Act), for three plants in the genus *Melicope* (alani): *M. adscendens*, *M. balloui*, and *M. ovalis*. All three species are endemic to the slopes of Haleakala on the island of Maui, Hawaiian Islands. The three plant species and their habitats have been variously affected or are currently threatened by one or both of the following: habitat degradation and damage to plants by feral and domestic animals (cattle and/or pigs) and competition for space, light, water, and nutrients by naturalized, introduced vegetation. Due to the small number of existing individuals and their very narrow distributions, these species and their populations are subject to reduced reproductive vigor or an increased likelihood of extinction from stochastic events. This proposal, if made final, would implement the Federal protection and recovery provisions provided by the Act. If made final, it would also activate and augment State regulations protecting endangered species of plants. Comments and materials related to this proposal are solicited.

DATES: Comments from all interested parties must be received by July 12, 1993. Public hearing requests must be received by June 25, 1993.

ADDRESSES: Comments and materials concerning this proposal should be sent to Robert P. Smith, Field Supervisor,

Pacific Islands Office, U.S. Fish and Wildlife Service, 300 Ala Moana Boulevard, Room 6307, P.O. Box 50167, Honolulu, Hawaii 96850. Comments and materials received will be available for public inspection, by appointment, during normal business hours at the above address.

FOR FURTHER INFORMATION CONTACT:
Robert P. Smith at the above address (808/541-2749).

SUPPLEMENTARY INFORMATION:

Background

Melicope adscendens, *M. balloui*, and *M. ovalis*, members of the citrus family (Rutaceae), are endemic to the slopes of Haleakala on the island of Maui, Hawaiian Islands. The island of Maui comprises remnants of two large shield volcanoes, the older West Maui Volcano on the west and the larger and much younger Haleakala Volcano on the east. These two volcanoes and the connecting isthmus formed by lava flows made up an island 1,888 square kilometers (sq km) (729 sq miles (mi)) in area. Haleakala, on East Maui, erupted just 200 years ago and has an elevation of 3,055 meters (m) (10,023 feet (ft)). Haleakala still retains its classic shield shape and has somewhat less diverse vegetation than the older more eroded West Maui Mountains. Rainfall on Haleakala averages about 890 centimeters (cm) (350 inches (in)) per year, with the mountain's windward (northeastern) slope receiving the most precipitation. However, Haleakala's inner crater is a dry cinder desert because it is above the level at which precipitation develops and is sheltered from moisture-laden winds (Gagne and Cuddihy 1990).

Melicope adscendens occurs in *Nestegis sandwicensis* (Olopuia) Lowland Mesic Forest. This vegetation type, which includes co-dominant *Pleomele auwahiensis* (hala pepe), now exists as scattered patches, much of the original area having been converted to pasture land. This forest occurs between the elevations of 30 and 1,600 m (100 and 5,250 ft). Rainfall falls mostly from October to March, and substrates are well-drained. *Melicope balloui* and *M. ovalis* occur in *Acacia koa*/*Metrosideros polymorpha* (Koa/'Ohi'a) Montane Wet Forest. This plant community occurs between the elevations of 1,200 and 2,200 m (3,900 and 7,200 ft). Annual rainfall is over 250 cm (98 in) and occurs evenly distributed throughout the year. The climate is warm, and frequent afternoon fog often results in fog drip. Substrates are volcanic with well developed soil. This is a highly stratified community, comprising, in order of canopy height: koa (up to 40 m

tall); 'ohi'a (up to 30 m tall); several native tree species (10 to 20 m tall); *Cibotium* (hapu'u) (understory canopy); and shrubs, herbs, ferns, and mosses (shade-tolerant understory) (Gagne and Cuddihy 1990; Hawaii Heritage Program (HHP) 1992a, 1992c, 1992d, 1992f).

The only known extant population of *Melicope adscendens* and one of two populations of *M. balloui* are located on privately owned land. The only known extant population of *M. ovalis* and the second population of *M. balloui* are in Haleakala National park, which is owned by the Federal government (HHP 1992a, 1992c, 1992d, 1992f).

Discussion of the Three Species Proposed for Listing

Melicope adscendens was first collected by Charles Noyes Forbes at Auwahi on the southwestern slopes of Haleakala in 1920. Harold St. John and Edward P. Hume (St. John 1944) later named and described the species as *Pelea adscendens*, choosing the specific epithet to describe the habit of the plant. Thomas G. Hartley and Benjamin C. Stone (1989, Stone *et al.* 1990, Wagner *et al.* 1990) synonymized the genus *Pelea* with *Melicope*, resulting in *M. adscendens*, the current name for this species.

Melicope adscendens is a sprawling shrub with long, slender branches covered with gray hairs when young and becoming hairless when older. New growth is covered with many fine, yellowish to golden brown hairs. The opposite, widely spaced, leathery to papery, elliptic leaves measure 1.5 to 6.5 cm (0.6 to 2.6 in) long and 1 to 4 cm (0.4 to 1.6 in) wide and have petioles 0.6 to 1.6 cm (0.2 to 0.6 in) long. Both upper and lower surfaces of mature leaves are hairless. Each flower cluster is on a main stalk 13 to 17 mm (0.5 to 0.7 in) long and comprises one to three flowers on individual stalks, usually 4 to 8 mm (0.2 to 0.3 in) long. Only female flowers have been observed, and each consists of four sepals about 3.5 mm (0.1 in) long, four petals about 5 mm (0.2 in) long, an eight-lobed nectary disk, eight reduced and nonfunctional stamens, and a hairless four-celled ovary. The 14 to 15 mm (0.6 in) wide fruit is made up of 4 distinct follicles (dry fruits splitting along one side) 7 to 7.5 mm (0.3 in) long. Sepals and petals remain attached to the mature fruit. The endocarp (inner fruit wall) and the wrinkled exocarp (outer fruit wall) are both hairless. *Melicope adscendens* is distinguished from other species of the genus by its habit, the distinct follicles of its fruit, and the persistent (remaining attached) sepals and petals (Stone 1969, Stone *et al.* 1990).

Melicope adscendens has been found only on the island of Maui on the southwestern slope of Haleakala. Two plants, separated by an unspecified distance, were found by Forbes in 1920. Today, one of these plants is still known to exist near Puu Quli on privately owned land; the other plant has not been relocated. This species typically grows in Olopuia Lowland Mesic Forest with hala pepe as a co-dominant at elevations between 914 and 1,200 m (3,000 and 3,900 ft). Associated species include *Chamaesyce celastroides* var. *lorifolia* ('akoko), *Dodonaea viscosa* ('ala'i), *outeria sandwicensis* ('ala'a), and *Styphelia tameiameia* (pukiawe). The plant grows next to a water pipeline on land used as a cattle (*Bos taurus*) ranch. Major threats are habitat damage and trampling by cattle, competition with the alien plant species *Lantana camara* (lantana) and *Pennisetum clandestinum* (Kikuyu grass), and reduced reproductive vigor and/or extinction from stochastic events due to the existence of only one known population with one individual. Potential threats include habitat degradation and damage to plants by feral axis deer (*Axis axis*), goats (*Capra hircus*) feral pigs (*Sus scrofa*), black twig borer (*Xylosandrus compactus*), fire and ranch activities (such as water pipeline maintenance) (HHP 1992a; Art Medeiros, Haleakala National Park, Robert Hobdy, Hawaii Department of Land and Natural Resources, and Steve Perlman, Hawaii Plant Conservation Center, pers. comms., 1992).

Melicope balloui was first collected by Horace Mann, Jr., and William Tufts Brigham in 1864 or 1865. When Wilhelm Hillebrand (1888) named this plant *Pelea mannii*, he cited this specimen as well as a specimen which is now thought to be *P. peduncularis*. If Mann and Brigham's specimen is chosen as the type of *P. mannii*, the correct name for the taxon will be *M. mannii*, and *M. balloui* will become a synonym (Stone *et al.* 1990). When naming *P. balloui*, Rock (1913) based his name on a specimen he had collected in 1910. Rock chose the specific epithet to honor Howard M. Ballou, who corrected the proof sheets of his landmark book on Hawaiian indigenous trees (Rock 1913). The specimen St. John cited as the type when he named and described *P. ukuleleensis* actually comprised material of both *P. balloui* and *P. clusiaefolia*, both previously validly published names (Stone 1963). Following the transfer of the genus *Pelea* to *Melicope* (Hartley and Stone 1989, Wagner *et al.* 1990), authors of the current treatment of the Hawaiian

members of the genus (Stone *et al.* 1990) now consider *P. balloui* and *P. ukuleleensis* to be synonyms of *M. balloui*.

Melicope balloui is a small tree or shrub, the new growth of which has yellowish brown woolly hairs and waxy scales. Plant parts later become nearly hairless. Leaves are opposite, leathery, inversely ovate to elliptic, 5 to 10 cm (2.0 to 3.9 in) long, 3 to 7 cm (1.2 to 2.8 in) wide, and have petioles 1.0 to 2.6 cm (0.4 to 1.0 in) long. The upper and lower surfaces of mature leaves are hairless except along the midrib of the lower surface. Each flower cluster is on a main stalk 3 to 16 mm (0.1 to 0.6 in) long and comprises five to nine flowers on individual stalks about 5 mm (0.2 in) long. Only female flowers have been observed, and each consists of four sepals about 3 mm (0.1 in) long, four petals about 4 mm (0.2 in) long, an eight-lobed nectary disk, eight reduced and nonfunctional stamens, and a four-celled ovary with many short, fine hairs. The fruit, a four-lobed capsule 2.5 to 2.7 cm (1.0 to 1.1 in) wide, consists of 1.2 to 1.3 cm (0.5 in) long carpels fused about a quarter of their length. Sepals and petals usually remain attached to the mature fruit. One or two glossy black seeds about 7 mm (0.3 in) long are found in each fertile carpel. The exocarp and endocarp are covered with fine, short hairs. *Melicope balloui* is distinguished from other species of the genus by the partially fused carpels of its four-lobed capsule and the usually persistent sepals and petals (Stone *et al.* 1990).

Melicope balloui has been found only on the island of Maui on the northern and southeastern slopes of Haleakala. There are two known extant populations, located approximately 4.0 km (2.5 mi) apart near Puu o Kaka'e on privately owned land and in Kipahulu Valley on federally owned land within Haleakala National Park. The two populations comprise an estimated total of no more than 10 individuals. This species typically grows in koa- and 'ohi'a-dominated Montane Wet Forests at elevations between 760 and 1,520 m (2,500 and 5,000 ft). Associated species include *Coprosma* sp. (pilo), *Dicranopteris linearis* (uluhe), *Joinvillea ascendens* ssp. *ascendens* ('ohe), and *Peperomia subpetiolata* ('ala'ala wai nui). Major threats are habitat degradation and damage to plants by feral pigs and reduced reproductive vigor and/or extinction from stochastic events due to the small number of existing populations and individuals. Potential threats include competition with alien plant species, such as *Paspalum conjugatum* (Hilo grass) and

Psidium cattleianum (strawberry guava); susceptibility to black twig borer; and habitat degradation and damage to plants by feral goats and axis deer (HHP 1992c, 1992d; Linda Cuddihy, Hawaii Volcanoes National Park, and A. Medeiros, Haleakala National Park, pers. comms., 1992).

Based on a specimen collected by Forbes in the mountains above Hana, East Maui, St. John (1944) described and named *Pelea ovalis*, choosing the specific epithet to refer to the shape of the leaves of the species. Hartley and Stone (1989) synonymized the genus *Pelea* with *Melicope*, resulting in the combination *M. ovalis*.

Melicope ovalis is a tree up to 5 m (16 ft) tall. New growth has fine, short, brownish hairs and soon becomes hairless. Leaves are opposite, leathery, broadly elliptic, 8 to 16 cm (3.1 to 6.3 in) long, 4 to 10 cm (1.6 to 3.9 in) wide, and have petioles 3 to 4 cm (1.2 to 1.6 in) long. The upper and lower surfaces of the leaves are hairless, and bruised foliage has an anise odor similar to that of *M. anisata* (mokihauna). Each flower cluster is on a main stalk 3 to 12 mm (0.1 to 0.5 in) long and comprises three to seven flowers on individual stalks 10 to 13 mm (0.4 to 0.5 in) long. The fruit, a capsule about 1 cm (0.4 in) long and 1.2 to 1.4 cm (0.5 to 0.6 in) wide, has carpels that are fused along almost their entire length. Each fertile carpel contains one or two glossy black seeds about 5 mm (0.2 in) long. The exocarp and endocarp are both hairless. *Melicope ovalis* is distinguished from other species of the genus by the almost entirely fused carpels of its capsule, its nonpersistent sepals and petals, and its well-developed petioles (Stone *et al.* 1990).

Melicope ovalis has been found only on the island of Maui on the eastern and southeastern slopes of Haleakala. There is one known extant population, located in Kipahulu Valley on federally owned land in Haleakala National Park. This species typically grows in koa- and 'ohi'a-dominated Montane Wet Forests at elevations between 850 and 1,430 m (2,800 and 4,700 ft). Associated species include *Broussaisia arguta* (kanawao), *Cheirodendron trigynum* ('olapea), and *Perrottetia sandwicensis* (olomea). Major threats are habitat degradation and damage to plants by feral pigs and reduced reproductive vigor and/or extinction from stochastic events due to the existence of only one population and one known individual. Competition with alien introduced plants such as Hilo grass and strawberry guava, susceptibility to black twig borer, and habitat degradation and damage to plants by feral goats and axis deer are

potential threats (HHP 1992e, 1992f; L. Cuddihy and A. Medeiros, pers. comms., 1992).

Previous Federal Action

Federal action on these plants began as a result of section 12 of the Act, which directed the Secretary of the Smithsonian Institution to prepare a report on plants considered to be endangered, threatened, or extinct in the United States. This report, designated as House Document No. 94-51, was presented to Congress on January 9, 1975. In that document, *Melicope balloui* (as *Pelea balloui*) and *M. ovalis* (as *P. ovalis*) were considered to be endangered. On July 1, 1975, the Service published a notice in the **Federal Register** (40 FR 27823) of its acceptance of the Smithsonian report as a petition within the context of section 4(c)(2) (now section 4(b)(3)) of the Act, and giving notice of its intention to review the status of the plant taxa named therein. As a result of that review, on June 16, 1976, the Service published a proposed rule in the **Federal Register** (41 FR 24523) to determine endangered status pursuant to section 4 of the Act for approximately 1,700 vascular plant species, including *M. balloui* (as *P. balloui*) and *M. ovalis* (as *P. ovalis*). The list of 1,700 plant taxa was assembled on the basis of comments and data received by the Smithsonian Institution and the Service in response to House Document No. 94-51 and the July 1, 1975, **Federal Register** publication. General comments received in response to the 1976 proposal are summarized in an April 26, 1978, **Federal Register** publication (43 FR 17909). In 1978, amendments to the Act required that all proposals over 2 years old be withdrawn. A 1-year grace period was given to proposals already over 2 years old. On December 10, 1979, the Service published a notice in the **Federal Register** (44 FR 70796) withdrawing the portion of the June 16, 1976, proposal that had not been made final, along with four other proposals that had expired.

The Service published a notice of review for plants on December 15, 1980 (45 FR 82479), in which *M. balloui* (as *P. balloui*) and *M. ovalis* (as *P. ovalis*) were considered to be Category 1 candidates for Federal listing. Category 1 species are those for which the Service has on file substantial information on biological vulnerability and threats to support preparation of listing proposals. In an updated notice of review published on September 27, 1985 (50 FR 39525), *M. balloui* (as *P. balloui*) was considered to be a Category 1 species, and *M. ovalis* (as *P. ovalis*) a Category 1* species. Category 1* taxa are those

which are possibly extinct. In a notice of review published February 21, 1990 (55 FR 6183), *M. adscendens* was treated as a Category 3A species and *M. balloui* and *M. ovalis* as Category 1* species. Category 3A species are those for which the Service has persuasive evidence of extinction. Because specimens collected in the past few years were recently verified as being these three species, they are now being proposed for listing.

Section 4(b)(3)(B) of the Act requires the Secretary to make findings on certain pending petitions within 12 months of their receipt. Section 2(b)(1) of the 1982 amendments further

requires all petitions pending on October 13, 1982, be treated as having been newly submitted on that date. On October 13, 1983, the Service found that the petitioned listing of *M. balloui* and *M. ovalis* was warranted, but precluded by other pending listing actions, in accordance with section 4(b)(3)(B)(iii) of the Act; notification of this finding was published on January 20, 1984 (49 FR 2485). Such a finding requires the petition to be recycled, pursuant to section 4(b)(3)(C)(i) of the Act. The finding was reviewed in October of 1984, 1985, 1986, 1987, 1988, 1989, 1990, and 1991. Publication of the present proposed rule constitutes the

final 1-year finding for *M. balloui* and *M. ovalis*.

Summary of Factors Affecting the Species

Section 4 of the Endangered Species Act (16 U.S.C. 1533) and regulations (50 CFR part 424) promulgated to implement the Act set forth the criteria and procedures for adding species to the Federal Lists. A species may be determined to be an endangered species due to one or more of the five factors described in section 4(a)(1). The threats facing these three species are summarized in Table 1.

TABLE 1.—SUMMARY OF THREATS

Species	Alien mammals				Insects	Alien plants	Fire	Human impacts	Limited numbers ¹
	Cattle	Deer	Goats	Pigs					
<i>Melicope adscendens</i>	X	P	P	P	P	X	P	P	X
<i>Melicope balloui</i>		P	P	X	P	P			X
<i>Melicope ovalis</i>		P	P	X	P	P			X

Key:

X = Immediate and significant threat.

P = Potential threat.

¹ = No more than 10 known individuals and no more than 2 known populations.

These factors and their application to *Melicope adscendens* (St. John and E. Hume) T. Hartley and B. Stone (alani), *M. balloui* (Rock) T. Hartley and B. Stone (alani), and *M. ovalis* (St. John) T. Hartley and B. Stone (alani) are as follows:

A. *The present or threatened destruction, modification, or curtailment of its habitat or range.* The native vegetation of East Maui has undergone extreme alterations because of past and present land management practices, including deliberate alien plant and animal introductions and agricultural development (Scott *et al.* 1986). Degradation of habitat by feral animals and competition with alien plants are considered to be the major threats to the three species being proposed.

Cattle, introduced to Maui in the early 1800s, were permitted to range freely and subsequently became quite numerous. Cattle have converted large tracts of forest to open pasture on southern and northwestern Haleakala. Feral cattle consume native vegetation, trample roots and seedlings, accelerate erosion, and promote the invasion of alien plants (Cuddihy and Stone 1990, Stone 1985). Along with goats, cattle are considered one of the two most damaging alien vertebrates to Hawaii's native ecosystems. The long history of

cattle grazing has so altered the southern slope of Haleakala that only pockets of native vegetation remain (Scott *et al.* 1986). The single known individual of *Melicope adscendens* grows in an area used for grazing, and cattle are considered an immediate threat to the species (A. Medeiros, pers. comm., 1992).

Goats were introduced to Maui by the early 1800s and are now a serious threat to the integrity of Maui rain forests. The impact of goats on the native vegetation is similar to that described for cattle (Cuddihy and Stone 1990, Stone 1985). Although they have now been removed, feral goats entered Kipahulu Valley in the past and could become a threat to *Melicope balloui* and *M. ovalis* if they return. Goats also occur near *M. adscendens* in Auwahi and are a potential threat to that species as well (A. Medeiros, pers. comm., 1992).

Axis deer cause habitat degradation by trampling, consuming, and overgrazing vegetation. This process removes ground cover and often results in soil erosion. Alien plant species are then able to exploit the newly disturbed areas (Cuddihy and Stone 1990). Axis deer have become established at low elevation slopes of western and southern Haleakala and may become a threat to mesic and wet native forests on Haleakala. They are a potential threat to

all three proposed species of *Melicope* (Scott *et al.* 1986; R. Hobdy and A. Medeiros, pers. comms., 1992).

In contrast to goats and cattle, pigs occupy the wetter regions of Hawaii's forests and are one of the major current modifiers of wet forest habitats. Pigs damage native vegetation by their rooting and trampling activities. This process encourages the ingress of alien plants, which are able to exploit newly disturbed soil better than native species. In addition, these animals disseminate alien plant species through their feces and on their bodies (Cuddihy and Stone 1990, Stone 1985). Pigs have severely damaged fragile and limited communities, such as that of *Argyroxiphium virens* (greensword) (Stone 1985). This species of greensword was found at an historic site of *Melicope balloui*, which has not been relocated since 1920, and it is possible that pig damage caused the destruction of the habitat (HHP 1992g). Although *M. balloui* and *M. ovalis* grow in areas of Kipahula Valley which are fenced to exclude pigs, the areas are not yet pig-free, so trampling of seedlings by this animal remains a threat to these two species (HHP 1992b, 1992d, 1992f; L. Cuddihy and R. Hobdy, pers. comms., 1992). Pigs are also present in Auwahi and constitute a potential threat to *M.*

adscendens (S. Perlman, pers. comm., 1992).

B. *Overutilization for commercial, recreational, scientific, or educational purposes.* Unrestricted collecting for scientific or horticultural purposes and excessive visits by individuals interested in seeing rare plants could result from increased publicity. This is a potential threat to all 3 of the proposed taxa, none of which has more than a total of 2 populations or 10 known individuals. Any collection of whole plants or reproductive parts of these species would cause an adverse impact on the gene pool and threaten the survival of the species.

C. *Disease or predation.* The black twig border is a small beetle about 1.6 mm (0.06 in) in length, which burrows into branches, introduces a pathogenic fungus as food for its larvae, and lays its eggs. Twigs, branches, and even an entire plant can be killed from such an infestation. In the Hawaiian Islands, black twig border has many hosts and is widespread. It is known to attack species of *Melicope* and is a potential threat to all three proposed species (Hara and Beardsley 1979).

D. *The inadequacy of existing regulatory mechanisms.* Hawaii's Endangered Species Act states, "Any species of aquatic life, wildlife, or land plant that has been determined to be an endangered species pursuant to the [Federal] Endangered Species Act shall be deemed to be an endangered species under the provisions of this chapter . . ." (HRS, sect. 195D-4(a)). Federal listing would automatically invoke listing under Hawaii State law, which prohibits taking of endangered plants in the State and encourages conservation by State agencies (HRS, sect. 195D-4). None of the three proposed species is presently listed as an endangered species by the State of Hawaii.

Melicope adscendens is found exclusively on privately owned land. One of the two known extant populations of *M. balloui* occurs on privately owned land within a conservation district. *M. ovalis* occurs exclusively on federal land; however, feral pigs still pose a threat in this area.

Conservation district lands are State zone designations, which are regarded as necessary for the protection of endemic biological resources and the maintenance or enhancement of the conservation of natural resources, among other purposes. The Hawaii Department of Land and Natural Resources is mandated to initiate changes in conservation district boundaries to include "the habitat of rare native species of flora and fauna within the conservation district" (HRS,

sect. 195D-5.1). Hawaii environmental policy, and thus approval of land use, is required by law to safeguard " . . . the State's unique natural environmental characteristics . . ." (HRS, sect. 344-3(1)) and includes guidelines to "Protect endangered species of individual plants and animals . . ." (HRS, sect. 344-4(3)(A)). State regulations are difficult to enforce due to limited personnel. Requests for amendments to district boundaries or variances within existing classifications can be made by government agencies and private landowners (HRS, sect. 205-4). Even if all other threats were removed by virtue of occurrence and protection on federal land or in conservation districts, these species would still be threatened with extinction due to their low numbers.

State laws relating to the conservation of biological resources allow for the acquisition of land as well as the development and implementation of programs concerning the conservation of biological resources (HRS, sect. 195D-5(a)). The State also may enter into agreements with Federal agencies to administer and manage any area required for the conservation, management, enhancement, or protection of endangered species (HRS, sect. 195D-5(c)). If federal listing were to occur, funds for these activities could be made available under section 6 of the Federal Act (State Cooperative Agreements).

Federal listing, because it automatically invokes State listing, would also trigger other State regulations protecting these three species of *Melicope*. The Federal Act would offer additional protection to these species because, if they were to be listed as endangered, it would be a violation of the Act for any person to remove, cut, dig up, damage, or destroy any such plant in an area not under Federal jurisdiction in knowing violation of State law or regulation or in the course of any violation of a State criminal trespass law.

E. *Other natural or manmade factors affecting its continued existence.* The small numbers of individuals and populations of these three species of *Melicope* increase the potential for extinction from stochastic events. The limited gene pool may depress reproductive vigor, or a single human-caused or natural environment disturbance could destroy a significant percentage of the individuals or an entire population, potentially causing the extinction of the species. Only one individual of *M. adscendens* is known to exist, the 2 populations of *M. balloui* contain a total of less than 10 known

individuals, and only 1 individual of *M. ovalis* has been definitely identified.

The only known individual of *Melicope adscendens* is located directly adjacent to a water pipeline used in ranching activities. Maintenance performed on the pipeline in the vicinity of the plant could damage or destroy the plant. In addition, cattle walking along the pipeline could easily trample the plant (A. Medeiros, pers. comm., 1992).

Competition with one or more alien plant species threatens one of the proposed *Melicope* species and constitutes a potential threat to the other two proposed species. Lantana, brought to Hawaii as an ornamental plant, is an aggressive, thicket-forming shrub that can now be found on all of the main islands in mesic forests, dry shrublands, and other dry, disturbed habitats (Wagner *et al.* 1990). Lantana threatens *Melicope adscendens* (A. Medeiros, pers. comm., 1992). Kikuyu grass, an aggressive, perennial grass introduced to Hawaii as a pasture grass, withstands trampling and grazing and produces thick mats that choke out other plants and prevent their seedlings from establishing. The species has been declared a noxious weed by the U.S. Department of Agriculture (7 CFR 360) and threatens *M. adscendens* (O'Connor 1990; Smith 1985; A. Medeiros, pers. comm., 1992). The perennial Hilo grass, naturalized in moist to wet, disturbed areas on most Hawaiian Islands, produces a dense ground cover, even on poor soil, and is a potential threat to *M. balloui* and *M. ovalis* (O'Connor 1990; L. Cuddihy, pers. comm., 1992). Strawberry guava, widely naturalized in mesic and wet Hawaiian forests, develops into stands in which few other plants grow and physically displaces natural vegetation. Pigs depend on strawberry guava for food and in turn disperse the plant's seeds through the forests (Smith 1985, Wagner *et al.* 1990). Strawberry guava, considered to be the greatest weed problem in Hawaiian rain forests, is invading Kipahulu Valley and is a potential threat to *M. balloui* and *M. ovalis* (L. Cuddihy, pers. comm., 1992).

Stochastic events such as human-set fires and wildfires destroy native Hawaiian vegetation and usually favor fire-resistant alien plants (Cuddihy and Stone 1990). Fire is a potential threat to *Melicope adscendens* (A. Medeiros, pers. comm., 1992).

The Service has carefully assessed the best scientific and commercial information available regarding the past, present, and future threats faced by these species in determining to propose this rule. Based on this evaluation, the preferred action is to list these three

species as endangered. The species consists of only 1 or 2 populations and 1 to about 10 known individual plants. They are threatened by habitat degradation and damage to plants by feral or domestic animals and by competition from alien plants. Small population size and limited distribution make these species particularly vulnerable to reduced reproductive vigor and/or extinction from stochastic events. Because these three species are in danger of extinction throughout all or a significant portion of their ranges, they fit the definition of endangered as defined in the Act.

Critical habitat is not being proposed for the three species included in this rule for reasons discussed in the "Critical Habitat" section of this proposal.

Critical Habitat

Section 4(a)(3) of the Act, as amended, requires that, to the maximum extent prudent and determinable, the Secretary designate critical habitat at the time the species is determined to be endangered. The Service finds that designation of critical habitat is not presently prudent for these species. Such a determination would result in no known benefit to the species. All three species have extremely low total populations and face anthropogenic threats. The publication of precise maps and descriptions of critical habitat in the **Federal Register** and local newspapers as required in a proposal for critical habitat would increase the degree of threat to these species from take or vandalism and, therefore, could contribute to their decline and increase enforcement problems. The listing of these species as endangered publicizes the rarity of the plants and, thus, can make the species attractive to researchers, curiosity seekers, or collectors of rare plants. All involved parties and the landowners have been notified of the importance of protecting the habitat of these species. Protection of the habitat of the species will be addressed through the recovery process and through the section 7 consultation process. Two species are found in Haleakala National Park, where Federal law protects all plants from damage or removal. Therefore, the Service finds that designation of critical habitat for these species is not prudent at this time, because such designation would increase the degree of threat from vandalism, collecting, or other human activities and because it is unlikely to aid in the conservation of these species.

Available Conservation Measures

Conservation measures provided to species listed as endangered under the Endangered Species Act include recognition, recovery actions, requirements for Federal protection, and prohibitions against certain activities. Recognition through listing encourages and results in conservation actions by Federal, State, and private agencies, groups, and individuals. The Endangered Species Act provides for possible land acquisition and cooperation with the State and requires that recovery actions be carried out for all listed species. The protection required of Federal agencies and the prohibitions against certain activities involving listed plants are discussed, in part, below.

Section 7(a) of the Act, as amended, requires Federal agencies to evaluate their actions with respect to any species that is proposed or listed as endangered and with respect to its critical habitat, if any is being designated. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR part 402. Section 7(a)(4) of the Act requires Federal agencies to confer informally with the Service on any action that is likely to jeopardize the continued existence of a proposed species or result in destruction or adverse modification of proposed critical habitat. If a species is listed subsequently, section 7(a)(2) requires Federal agencies to insure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of such a species or to destroy or adversely modify its critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency must enter into formal consultation with the Service. One species (*Melicope ovalis*) is located only in Haleakala National Park. One population of another species (*M. ballouii*) is also found in this park. Laws relating to national parks prohibit damage or removal of any plants growing in the parks. There are no other known Federal activities that occur within the present known habitat of these three plant species.

The Act and its implementing regulations found at 50 CFR 17.61, 17.62, and 17.63 for endangered plants set forth a series of general prohibitions and exceptions that apply to all endangered plant species. With respect to the three plant species proposed to be listed as endangered, all trade prohibitions of section 9(a)(2) of the Act, implemented by 50 CFR 17.61, would apply. These prohibitions, in part, make

it illegal with respect to any endangered plant for any person subject to the jurisdiction of the United States to import or export; transport in interstate or foreign commerce in the course of a commercial activity; sell or offer for sale in interstate or foreign commerce; remove and reduce to possession any such species from areas under Federal jurisdiction; maliciously damage or destroy any such species on any area under Federal jurisdiction; or remove, cut, dig up, damage, or destroy any such species on any other area in knowing violation of any State law or regulation or in the course of any violation of a State criminal trespass law. Certain exceptions apply to agents of the Service and State conservation agencies. The Act and 50 CFR 17.62 and 17.63 also provide for the issuance of permits to carry out otherwise prohibited activities involving endangered plant species under certain circumstances. It is anticipated that few trade permits would ever be sought or issued. These species are not common in the wild and are rarely, if ever, cultivated.

Requests for copies of the regulations concerning listed plants and inquiries regarding prohibitions and permits may be addressed to the Office of Management Authority, U.S. Fish and Wildlife Service, 4401 North Fairfax Drive, Room 432, Arlington, Virginia 22203-3507 (703/358-2104; FAX 703/358-2281).

Public Comments Solicited

The Service intends that any final action resulting from this proposal will be as accurate and as effective as possible. Therefore, comments or suggestions from the public, other concerned governmental agencies, the scientific community, industry, or any other interested party concerning this proposal rule are hereby solicited. Comments particularly are sought concerning:

(1) Biological, commercial trade, or other relevant data concerning any threat (or lack thereof) to these three species;

(2) The location of any additional populations of these species and the reasons why any habitat should or should not be determined to be critical habitat as provided by section 4 of the Act;

(3) Additional information concerning the range, distribution, and population size of these species; and

(4) Current or planned activities in the subject area and their possible impacts on these species.

The final decision on this proposal will take into consideration the comments and any additional

information received by the Service, and such communications may lead to a final regulation that differs from this proposal.

The Endangered Species Act provides for at least one public hearing on this proposal, if requested. Hearing requests must be received within 45 days of the date of publication of the proposal. Such requests must be made in writing and addressed to the Field Supervisor (see ADDRESSES section).

National Environmental Policy Act

The Fish and Wildlife Service has determined that an Environmental Assessment or Environmental Impact Statement, as defined under the authority of the National Environmental Policy Act of 1969, need not be prepared in connection with regulations adopted pursuant to section 4(a) of the Endangered Species Act of 1973, as amended. A notice outlining the Service's reasons for this determination was published in the *Federal Register* on October 25, 1983 (48 FR 49244).

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Author

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List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, and Transportation.

Proposed Regulation Promulgation

Accordingly, it is hereby proposed to amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:

PART 17—[AMENDED]

1. The authority citation for part 17 continues to read as follows:

Authority: 16 U.S.C. 1361-1407; 16 U.S.C. 1531-1544; 16 U.S.C. 4201-4245; Pub. L. 99-625, 100 Stat. 3500; unless otherwise noted.

2. It is proposed to amend § 17.12(h) by adding the following, in alphabetical order under the family indicated, to the List of Endangered and Threatened Plants:

§ 17.12 Endangered and threatened plants.

* * * * *

(h) * * *

Species		Historic range	Status	When listed	Critical habitat	Special rules
Scientific name	Common name					
Rutaceae—Citrus family:						
<i>Melicope(-Pelea) adscendens.</i>	Alani	U.S.A. (HI)	E		NA	NA
<i>Melicope(-Pelea) balloui.</i>	Alani	U.S.A. (HI)	E		NA	NA

Species		Historic range	Status	When listed	Critical habitat	Special rules
Scientific name	Common name					
<i>Melicope(-Pelea) ovalis</i>	Alani	U.S.A. (HI)	E		NA	NA

Dated: April 23, 1993.

Richard N. Smith,

Acting Director, Fish and Wildlife Service.

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